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MAINE  
EDUCATIONAL  
DEPT.  
MINIMUM  
REQUIREMENTS  
FOR  
APPROVAL  
WITH  
SUGGESTED  
COURSES  
OF  
STUDY  
FOR  
FREE HIGH SCHOOL  
AND  
ACADEMIES



Class \_\_\_\_\_

Book \_\_\_\_\_

**STATE OF MAINE.**

**Educational Department.**

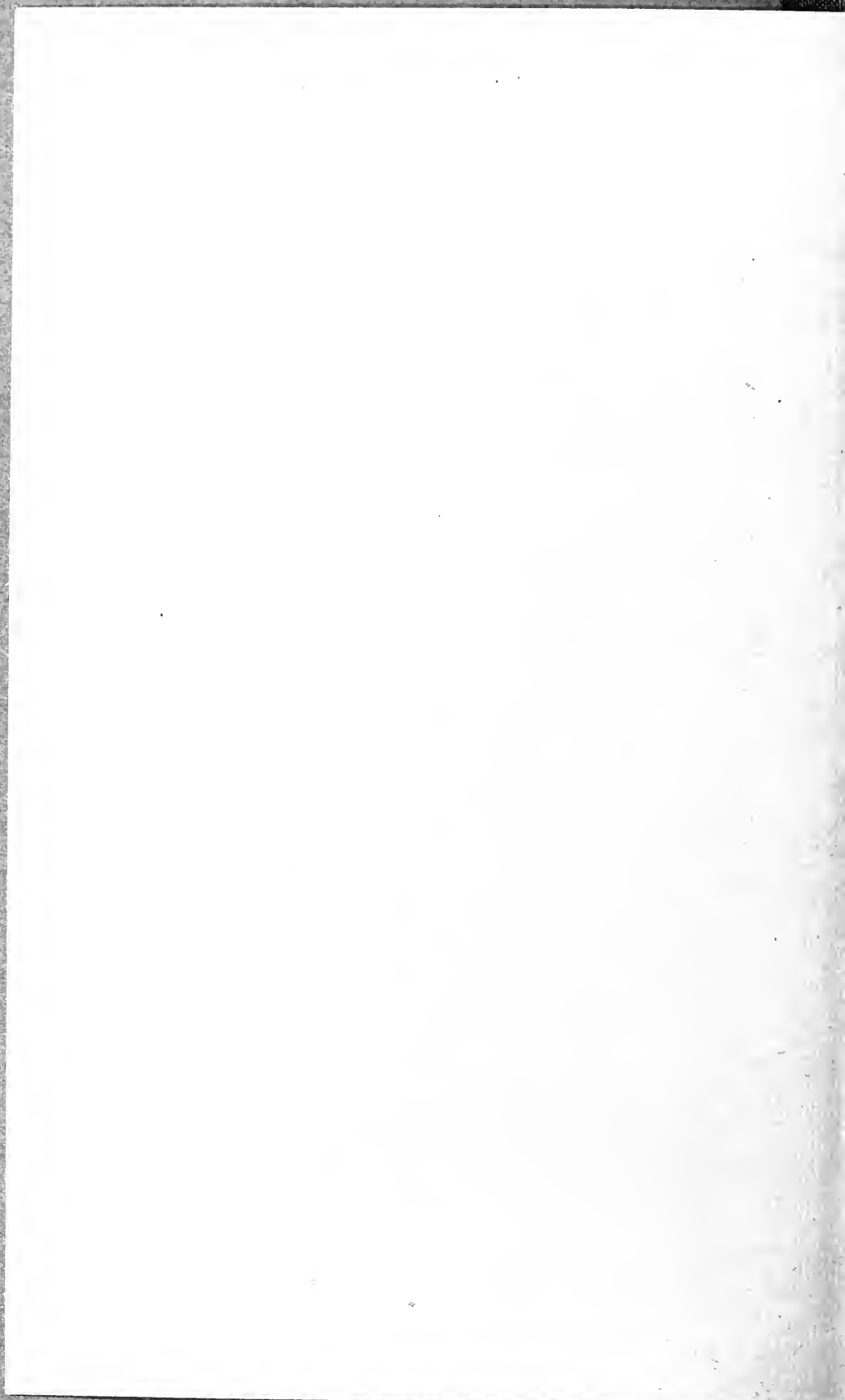
**Minimum Requirements for Approval**

**WITH**

**Suggested Courses of Study**

**FOR**

**Free High Schools and Academies.**





## STATE AID FOR FREE HIGH SCHOOLS.

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The first returns on the basis of an "Act for the Improvement of Free High Schools" will be due from the towns to the State Superintendent of Schools during July, 1910. The law provides that payment of State aid shall be made to towns during the month of December. Towns, precincts and unions of towns meeting the provisions of the law will be entitled to re-imbursement for two-thirds of the amount spent for instruction exclusive of tuitions, but no town, precinct or union of towns will be entitled to receive more than \$500 in any one year. The same proportion and limit of re-imbursement apply in the cases of high schools of any of the three classes A, B or C.

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### CLASS A. HIGH SCHOOLS

Any town, precinct or union of towns will not be entitled to State aid for the support of a high school of Class A. unless the returns show:

1. That the high school was legally established by vote of town, precinct or union of towns.
2. That at least \$850 were expended during the year for instruction exclusive of all tuitions.
3. That at least two teachers were employed.
4. That the school was in session for at least thirty-six weeks.
5. That an approved laboratory equipment was supplied.
6. That a four years' standard course of study, approved by the State Superintendent of Public Schools, was maintained.

### CLASS B. HIGH SCHOOLS

Any town, precinct or union of towns will not be entitled to State aid for the support of a high school of Class B. unless the returns show that:

1. The school was legally established by vote of the town, precinct or union of towns.
2. That at least \$500 were expended for instruction exclusive of all tuitions.
3. That the school was in session at least thirty-six weeks.
4. That an approved equipment was provided.
5. That a standard course of study, approved by the State Superintendent of Public Schools, covering at least two years of secondary school work was maintained.

### CLASS C. HIGH SCHOOLS

Any town, precinct or union of towns will not be entitled to State aid for the support of a high school of Class C. unless the returns show that:

1. The school was legally established by vote of the town, precinct or union of towns.

2. That at least \$450 were expended for instruction exclusive of all tuitions.
3. That at least one approved four years' course of study was maintained.
4. That the school was in session for at least thirty weeks.

## **COURSES OF STUDY**

### **CLASS A. HIGH SCHOOL**

The English or college course as outlined on the following pages represents the minimum requirement for an approved high school of Class A.

Note: A school offering one course meets the requirements of the law. The English course is recommended to schools that adopt but one course. It is strongly urged, however, that committees having charge of schools of this class adopt both the English and college preparatory courses. These two may be offered with only a slight extension of the number of recitation periods.

### **CLASS B. HIGH SCHOOL**

The minimum requirements for high schools of Class B. are represented by the first two years of the English or college preparatory course. (See note under Class A.)

### **CLASS C. HIGH SCHOOL**

A course specially arranged for schools of this class is given on page ten. The special needs and circumstances of the community and school will suggest changes in this outline, but such changes should be submitted for the approval of the State Superintendent of Schools.

NOTE: The option shown in the following course is intended for the use of committees in arranging courses to suit the local needs and conditions. It is not intended for the use of students in making electives. In schools having few teachers a wide choice of electives is not practicable.

In arranging courses committees should decide upon certain branches to be pursued consecutively for more than one year. For example: If Latin is adopted in the first year it should be continued for at least two years and probably for three or four. If Physics is adopted for the third year it should be followed by Chemistry in the fourth.

#### ENGLISH COURSE.

First Year.	Second Year	Third Year.	Fourth Year.
English History Algebra Physical Geography $\frac{1}{2}$ year Commercial Geography $\frac{1}{2}$ year	4 English 5 Geometry 5 History French Physiology $\frac{1}{2}$ year Botany $\frac{1}{2}$ year Book-keeping	English Physics French German Adv. Algebra and Geometry History Commercial Arithmetic	English American History and Civics Reviews Latin Chemistry French German Geology $\frac{1}{2}$ year Astronomy $\frac{1}{2}$ year Political Economy $\frac{1}{2}$ year
	4 5 5 Select two subjects. } 10	3 Select three subjects. } 15	3 4 3 Select two subjects } 10

Explanation: The figures shown at the right of the name of the study indicates the number of recitation periods each week.



# COLLEGE PREPARATORY COURSE.

First Year.	Second Year.	Third Year.	Fourth Year.
English 4	English 4	English 3	English 3
History 5	Latin 5	Latin 5	Latin 5
Algebra 5	Geometry 5	French or Greek or German } 5	Geometry 3
Latin 5	French or German or Greek } 5		American History } 4
		Algebra 3	and Civics }
		History 4	Select one subject. } 5
			Science
			Greek
			French
			German

(See Explanation under "English Course.")

# SUPPLEMENTARY COURSES SUGGESTED FOR FREE HIGH SCHOOLS. COMMERCIAL COURSE.

This course is recommended only for larger village and city high schools in which it would be possible to employ a special teacher for the direction of the course. Smaller high schools may make a satisfactory arrangement by substituting the necessary amount of commercial work in the last two years of the English Course. The course will not receive approval as a minimum standard course when offered without the English or college preparatory course.

First Year.	Second Year.	Third Year.	Fourth Year.
Algebra	Commercial Arithmetic 4	Book-keeping 3	Stenography } 5*
English	Book-keeping 3	Business Correspondence 3	Typewriting } 5
Commercial Arithmetic 4	English 3	Commercial Geography 3	Office Work 5
Penmanship } 3	Geometry 5	Stenography } 5*	Commercial Law 5
Spelling 3	Penmanship } 3	Typewriting } 5	Reviews 5
Book-keeping 3	Spelling 3	Penmanship } 3	
		Spelling 3	

\* The five recitations given to Stenography and Typewriting each week are for instruction, and do not include the extra practice periods ordinarily assigned for those subjects.

## MECHANICAL COURSE.

This course is recommended only for larger villages and city high schools where it is desired to correlate the work of the schools with the industries of the town. It should be adopted only in schools where a special teacher can direct and follow the work of the pupils electing the course and in towns where the co-operation of the manufacturers can be secured.

This course cannot be approved as a minimum standard course when offered without the English or college preparatory course.

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First Year.	Second Year	Third Year.	Fourth Year.
English 5	English 5	English 5	English 5
Algebra 5	Geometry 5	Physics 5	Chemistry 5
Free hand and Mechanical Drawing 5	Free hand and Mechanical Drawing 5	Free hand and Mechanical Drawing 5	Free hand and Mechanical Drawing 5
Wood Working 5	Wood and Metal Working 5	Forging Shop Work correlated with industry of the town.	Civics and U. S. Hist. 5
			Shop Work correlated with industry of the town.

# HOUSEHOLD ARTS COURSE.

This course should be offered only in schools where it is possible to employ a special teacher of domestic science. It cannot be accepted as a minimum standard course when offered without the English or college preparatory course.

First Year.	Second Year.	Third Year.	Fourth Year.	
English	English	English	English	3
History	History	Modern Language	Modern Language	4
Mathematics	Designing	Physics	Reviews	5
Drawing	Sewing	Household	Cooking	
Household Arts	Millinery	Hygiene	Household	
Sewing, Music	Modern Language	Physiology	Accounts	5
	Music (optional)	Music (optional)	Marketing	

# AGRICULTURAL COURSE.

This course is recommended in conjunction with the regular course for high schools in rural towns. It may be adapted to the conditions of some high schools of Class C. It cannot be accepted as the minimum standard course for high schools of classes A and B when offered without the English or college preparatory course. Teachers in schools using this course will find much suggestive material for use of teachers in "A Course in Agriculture for High Schools and Academies in Maine."

First Year.	Second Year.	Third Year.	Fourth Year.	
English	English	English	English	5
History	Geometry	Chemistry	Reviews	5
Algebra	History	History	Commercial	}
Soil Study	Biology	Civics	Arithmetic	
Botany, School Gardening	School Gardening	Field Crops	Book-keeping	5
		Dairying	(single entry)	
		School Gardening		5



# CLASS C. HIGH SCHOOL.

## SUGGESTED COURSE.

First Year.	Second Year.	Third Year.	Fourth Year.
English Grammar 5	English 5	English 5	English 5
Arithmetic 5	Algebra 5	Geometry 5	Natural Science 5
Geography 5	History 5	History 5	Commercial Law $\frac{1}{2}$ year
American History. 5	Latin or Physical Geography $\frac{1}{2}$ year and Botany $\frac{1}{2}$ year } 5	French or Latin or Book-keeping } 5	Commercial Geography $\frac{1}{2}$ year
			Latin } Select two subjects. 10
			French }
			History }

## LABORATORY EQUIPMENT.

The minimum laboratory requirement presupposes:

- (1) A room specially equipped for the teaching of science.
- (2) A stock room, or large closet, for the storage of apparatus.
- (3) A liberal supply of scientific reference books in the school library.

The minimum laboratory requirement for Physics and Chemistry is given on the following pages. The so-called "sub-sciences," (Physical Geography, Geology, Botany, Astronomy, etc.) may call for an equipment of charts, specimens, and microscopes. Suitable apparatus can be secured by conference with the local dealer or from the L. E. Knott Apparatus Company, No. 16 Harcourt St., Boston.

### CHEMISTRY.

*Individual Apparatus* (estimated cost \$6.00 to \$7.00.)

Each pupil should be provided with the following apparatus:

- 4 wide mouthed bottles (horse-radish size).
- 1 soda bottle.
- 1 glass stirring rod.
- 1 glass funnel.
- 1 flask (200 cc.).
- 1 graduate (50 cc.).
- 1 mortar and pestle.
- 6 test tubes.
- 1 test tube rack.
- 1 test tube holder.
- 1 thistle tube.
- 1 Bunsen burner or alcohol lamp.
- 4 reagent bottles (marked HCl, H<sub>2</sub>SO<sub>4</sub>, HNO<sub>3</sub>, NH<sub>4</sub>OH).
- 1 pneumatic trough.
- 1 blow pipe.
- 1 iron ring stand.
- 1 porcelain evaporating dish.
- 1 asbestos paper.
- 1 fine wire gauze (4 inches square).
- 1 iron, or tin, plate.
- 1 pair forceps.

- 4 pieces window glass (4 inches square).
- 1 round file.
- 1 triangular file.
- 1 nest of beakers.

*General Apparatus.* In addition to an adequate supply of chemicals, the laboratory should contain such amounts of the following apparatus as the size of the class demands:

Scales with metric weights, electrolytic apparatus, dry batteries, Fahrenheit thermometer, centigrade thermometer, wire cutter, metric rule, liquid cell, glass tubing, copper wire, filter papers, litmus paper, platinum wire, rubber tubing.

### PHYSICS.

The following list of apparatus (estimated cost, \$60.00) constitutes the minimum requirement for a single pupil, or for a class of four working in divisions of two pupils each. Where the class exceeds that number, a duplication of many of the parts will be expected.

- 2 meter sticks, metric scale on one side, English scale on the other.
- 1 iron weight 1 kilo.
- 1 iron weight 1-2 kilo.
- 1 set metric weights, kilo to 1 gram.
- 1 set iron weights 16-oz., 8-oz., and 4-oz.
- 2 each, flasks 100 cc., 300 cc., and 500 cc.
- 2 each, beakers 2-oz., 4-oz., and 8-oz.
- 6 test tubes, 6" long.
- 1 spool bare copper wire, No. 30.
- 1 spool bare copper wire, No. 18.
- 1 cylindrical graduate, 500 cc.
- 1 perforated iron ball, 1" diameter.
- 1 perforated brass ball, 1" diameter.
- 1 perforated lead ball, 1" diameter.
- 1 spring balance, 8-oz. and 250 grams.
- 1 spring balance, 64-oz. and 2000 grams.
- 1 apparatus for specific gravity.
- 1 hydrometer jar.
- 1 scale pan.
- 1 dozen brass weights, with hooks on top and bottom.
- 1 car for inclined plane.
- 1 inclined plane.

- 1 single pulley.
- 1 double pulley.
- 1 triple pulley.
- 2 pulleys with screws.
- 1 tuning fork C1.
- 1 tuning fork C2.
- 1 sonometer.
- 1 dozen candles.
- 1 kerosene lamp with asbestos shade.
- 1 greased card for Bunsen photometer.
- 1 Fahrenheit thermometer.
- 1 centigrade thermometer.
- 1 each glass funnels 2 1-2", 3" and 4".
- 1-2 lb. assorted glass tubing.
- 2 bar magnets 12".
- 1 horseshoe magnet 8".
- 1 magnetic needle, agate bearing.
- 1 galvanometer.
- 1 lb. iron filings.
- 1 piece fine wire gauze 4 x 4".
- 2 gravity cells 6 x 8".
- 5 lbs. copper sulphate.
- 1 resistance box.
- 1 set spools of double silk insulated wire, known lengths and sizes.
- 1 gold leaf electroscope.
- 1 hard rubber rod.
- 1 glass rod.
- 1 rubber comb.
- 1 Boyle's law tube and support.
- 1 lb. mercury.
- 1 horn pan balance with weights.
- 1 mounted resonance tube and piston.
- 1 lb. fine shot.
- 1 piece iron wire gauze 6" square.
- 1 electrophorus.
- 3 alcohol lamps.
- 1 double convex lens, 10 centimeters focus.
- 1 double convex lens, 15 centimeters focus.
- 1 double convex lens, 5 centimeters focus.
- 1 holder for lenses.

## **TUITION OF STUDENTS IN APPROVED STANDARD SECONDARY SCHOOLS**

According to the provisions of Sections 63 and 64 of Chapter 15 of the Revised Statutes as amended by the Public Laws of 1909, and as provided in "An Act for the Improvement of Free High Schools," any student residing in a town that does not support a high school having an approved standard secondary course, may attend a high school of Class A. or B., or an approved academy, and such student's tuition will be paid by the town of his residence, provided he has been found qualified to pursue such a course, and provided he maintains a satisfactory standard of scholarship. The liability of the town in each tuition case does not exceed thirty dollars in any one year. Any student who resides in a town supporting a high school of Class B. will not be entitled to payment of tuition in another school for the first two years of the secondary school course.

Any student seeking the advantages of Sections 63 and 64 must be examined by the superintendent of schools of the town in which he resides. Papers for these examinations are to be procured from the State Superintendent of Public Schools. The local superintendent of schools should publicly announce the date and place of these examinations. Papers for State examinations for entrance to secondary schools will be ready for distribution June 15th and August 15th of each year. Examinations for entrance may be conducted within a stated time after the above named dates.

Principals and school authorities having charge of secondary schools should not receive students unless they present certificates showing they have satisfactorily met the requirements of the law relating to examination.

Students certificated on local examinations given prior to July 3, 1909, will not be required to take additional examination for entrance in September, 1909.



## **ACADEMY COURSES**

### **ENGLISH AND COLLEGE PREPARATORY COURSES**

The minimum requirements for the foregoing courses outlined for free high schools, apply likewise to the English and college preparatory courses in academies seeking special aid under the provisions of Sections 76 to 82 of Chapter 15 of the Revised Statutes as amended.

### **TEACHERS' TRAINING COURSE**

Academies seeking special aid for a teachers' training course as provided under Section 76 of Chapter 15 of the Revised Statutes may arrange such a course in conjunction with the English Course. The following additional requirements are made in the case of the training course for teachers:

A. The school must employ a critic teacher who is a graduate of a normal school of a grade equal to that of the State normal schools.

B. The course must provide opportunity for not less than six weeks of practice work in schools of elementary grade.

C. During the last two years of the course an average of not less than two forty-five minute periods each day must be devoted to the following subjects:

1. History of Education.
2. Elementary Psychology.
3. School Management.
4. Methods of Teaching.
5. School Law.
6. Model School Observation and Practice.

The foregoing subjects are named in the order in which they should be offered in the course.

### **MANUAL TRAINING COURSE**

Under the provisions of Chapter 102 of the Public Laws of 1909 special State aid may also be granted to academies that offer courses in agriculture, manual training or domestic science.

The following minimum requirements are made for the course in manual training:

Such course may be offered supplementary to one of the foregoing courses but must be continued through the four years of the regular course and must be offered for not less than two forty-five minute periods each week. The course must be given under the direction of a teacher specially trained for the work, and a full equipment of benches and tools must be provided.

The following subjects are suggested for the course in manual training:

1. Mechanical Drawing (required throughout the course.)
- \* 2. Basketry and Weaving.
- \* 3. Leather Working.
- \* 4. Wood Working.
- \* 5. Metal Working.
6. Forging.

\* For a detailed list of models see pages 22-23 of the pamphlet "Special Course in Manual Training," which may be had by application to the State Educational Department.

#### **COURSE IN DOMESTIC SCIENCE**

The course in domestic science may be offered in connection with one of the regular four years' courses of the academy. Such a course must be offered for not less than the equivalent of two forty-five minute recitation periods each week. It must be given under the direction of a teacher specially trained for the work, and a full equipment must be provided.

#### **AGRICULTURAL COURSE**

For a special course in agriculture for academies see "A Course in Agriculture for High Schools and Academies in Maine." This course will be sent on application to the State Superintendent of Schools.









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